(FILE 'HOME' ENTERED AT 16:43:26 ON 02 JAN 2003)

FILE 'MEDLINE, EMBASE, CANCERLIT, BIOTECHDS, CAPLUS' ENTERED AT 16:44:05 ON 02 JAN 2003

L1	316995	S ACRYLIC OR METHACRYLIC ACID OR MALEIC ANHYDRIDE OR EMA
L2	255	S EQUINE INFLUENZA VIRUS
L3	2	S L1 AND L2
L4	2	DUP REM L3 (0 DUPLICATES REMOVED)
L5	361873	S VACCINE OR ADJUVANT
L6	473	S L5 AND L1
L7	2184896	S PLASMID OR DNA
L8	17	S L6 AND L7
L9	15	DUP REM L8 (2 DUPLICATES REMOVED)
L10	2	S L1 AND DNA VACCINE
L11	5163	S DNA VACCINE
L12	5	S L11 AND (POLYMER AND COPOLYMER)
L13	4	DUP REM L12 (1 DUPLICATE REMOVED)
L14	158945	S ADJUVANT
L15	376	S L14 AND L1
L16	12	S L15 AND L7
L17	11	DUP REM L16 (1 DUPLICATE REMOVED)
L18	648	S L11 AND L14
L19	1278238	S POLYMER OR MICROPARTICLE OR COPOLYMER OR POLYMERIC
L20	28	S L19 AND L18
L21	20	DUP REM L20 (8 DUPLICATES REMOVED)
L22	172	S L1 AND VECTOR
L23	54	S L22 AND (DNA OR PLASMID)
L24	42	DUP REM L23 (12 DUPLICATES REMOVED)

L17 ANSWER 6 OF 11 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 2000-02300 BIOTECHDS
TI Live recombinant vaccine comprising virus vector and polymeric **adjuvant**, particularly directed against animal herpes and influenza viruses;
recombinant vaccine production with a virus vector encoding a pathogen gene and an **adjuvant** for virus infection vaccination
AU Audonnet J C; Minke J M
PA Merial
LO Lyons, France.
PI WO 9944633 10 Sep 1999
AI WO 1999-FR453 1 Mar 1999
PRAI FR 1998-2800 3 Mar 1998
DT Patent
LA French
OS WPI: 2000-022918 [02]
AB A live recombinant vaccine which consists of a virus vector (A) containing a heterologous **DNA** sequence (I) (particularly encoding a gene from a pathogen) and at least on **adjuvant** (II), i.e. a methylacrylic acid polymer or a copolymer of **maleic anhydride** and alkenyl derivatives, is new. Also claimed is a vaccination kit which consists of lyophilized (A) and a solution of (II), in separate containers. These new vaccines may be particularly useful for protecting against animal herpes and influenza viruses, but they may also be useful for protecting against cat leukemia, tetanus toxin and dog distemper. The vaccines may be administered either parentally via a s.b., i.m. or i.d. injection, or mucosally. In an example, virus RNA from horse influenza virus strain Prague 56 was cloned into a **plasmid** to form vector **plasmid** pJT008. pJT008 was then linearized and used for in vitro recombination with a commercial canary-pox virus to form vCP1502 recombinant virus. (40pp)

L17 ANSWER 6 OF 11 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 2000-02300 BIOTECHDS
TI Live recombinant vaccine comprising virus vector and polymeric **adjuvant**, particularly directed against animal herpes and influenza viruses;
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AU Audonnet J C; Minke J M
PA Merial
LO Lyons, France.
PI WO 9944633 10 Sep 1999
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LA French
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L17 ANSWER 5 OF 11 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 2000-00707 BIOTECHDS
TI Vaccine containing naked **DNA** and **acrylic** acid polymer or maleric anhydride copolymer, for protection against virus or bacterial diseases in animals;
vector **plasmid**-mediated gene transfer and expression in horse, pig, cattle, bird, dog or cat as a nucleic acid vaccine for bacterium and virus infection therapy
AU Audonnet J C F; Minke J M
PA Merial
LO France.
PI FR 2776928 8 Oct 1999
AI FR 1998-4409 3 Apr 1998
PRAI FR 1998-4409 3 Apr 1998
DT Patent
LA French
OS WPI: 1999-593389 [51]
AB A nucleic acid vaccine which consists of naked **DNA** that includes and expresses in vivo, a sequence (I) which encodes an antigenic protein and at least one **adjuvant** (III) that is an **acrylic** or **methacrylic acid** polymer or a copolymer of maleric anhydride with an alkenyl derivatives, is new. Also claimed is a method for using (III) as an **adjuvant** in a nucleic acid vaccine containing, and expressing in vivo a heterologous sequence. These new nucleic acid vaccines may be useful for protecting animals (pigs, horses, dogs, cattle, cats and birds) against a wide variety of virus and bacterial infections. The vaccines have the advantage of being simple and easy to prepare (simply by mixing components) and they do not involve any strong interactions between **DNA** and other components that are likely to cause complex formation. In an example, reverse-transcription polymerase chain reaction was used to construct 3 **plasmid** vectors which were used as the nucleic acid vaccines. (33pp)

L17 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1999:659270 CAPLUS
DN 131:298650
TI Polymer adjuvants for use with vector vaccines
IN Audonnet, Jean-christophe Francis; Minke, Jules Maarten
PA Merial, Fr.
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9951269	A1	19991014	WO 1999-FR666	19990322
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2776928	A1	19991008	FR 1998-4409	19980403
	FR 2776928	B1	20000623		
	CA 2327389	AA	19991014	CA 1999-2327389	19990322
	AU 9928448	A1	19991025	AU 1999-28448	19990322
	AU 744964	B2	20020307		
	BR 9909342	A	20001212	BR 1999-9342	19990322
	EP 1066055	A1	20010110	EP 1999-909069	19990322
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002510651	T2	20020409	JP 2000-542039	19990322
PRAI	FR 1998-4409	A	19980403		
	WO 1999-FR666	W	19990322		

AB Polymer adjuvants that increase the efficacy of vector vaccines carrying an expression cassette for an antigen gene of a pathogen are described. The polymers are **acrylic** or methacrylic polymers and the **maleic anhydride** copolymers and alkenyl deriv. The **adjuvant** compd. is preferably a carbomer or an **EMA**.RTM.. Construction of expression vectors for a no. viral antigen genes were constructed using the com. expression vector pVR1012 is described. Inoculation of horses, swine, cattle, and dogs with these vectors with Carbopol 974P as an **adjuvant** is demonstrated. Use of the **adjuvant** led to the appearance of antibody to the antigens.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 18 OF 20 MEDLINE DUPLICATE 3
AN 1998382497 MEDLINE
DN 98382497 PubMed ID: 9714699
TI Intranasal administration of HIV-**DNA vaccine** formulated with a **polymer**, carboxymethylcellulose, augments mucosal antibody production and cell-mediated immune response.
AU Hamajima K; Sasaki S; Fukushima J; Kaneko T; Xin K Q; Kudoh I; Okuda K
CS Department of Bacteriology, Yokohama City University School of Medicine, Yokohama, 236, Japan.
SO CLINICAL IMMUNOLOGY AND IMMUNOPATHOLOGY, (1998 Aug) 88 (2) 205-10. Journal code: 0356637. ISSN: 0090-1229.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 199809
ED Entered STN: 19981008
Last Updated on STN: 19981008
Entered Medline: 19980929
AB We previously reported that intramuscular (i.m.) immunization of **DNA vaccine** encoding human immunodeficiency virus type 1 (HIV-1)IIIB env and rev genes alone or in combination with appropriate **adjuvant** induces substantial and enhanced immune response against HIV-1. In the present study, we examined whether a **polymer**, low-viscosity carboxymethylcellulose sodium salt (CMCS-L), has an **adjuvant** effect on immune response induced by DNA vaccination. BALB/c mice were immunized with HIV-**DNA vaccine** formulated with CMCS-L via the intranasal (i.n.) and i.m. routes. The combination with the **polymer** elicited higher levels of antigen-specific serum IgG and fecal IgA antibodies than **DNA vaccine** alone. For cell-mediated immunity, HIV-specific delayed-type hypersensitivity response and cytotoxic T lymphocyte activity were measured by the footpad-swelling test and the 51Cr-release assay, respectively. Both were enhanced by the combination with CMCS-L via i.n. and i.m. inoculation. Cytokine analysis in culture media of bulk splenocytes harvested from immunized animals showed higher levels of IL-4 production in i.n. -immunized mice compared with i.m.-immunized mice. Nevertheless, the increased IFN-gamma production resulting from the combination with CMCS-L was observed only in i.n.-immunized mice. These data indicate that i.n. immunization of HIV-**DNA vaccine** formulated with CMCS-L enhances HIV-specific mucosal antibody (Ab) and systemic Ab and cell-mediated immune response.

L21 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2003 ACS
AN 2002:51240 CAPLUS
DN 136:107525
TI Microspheres and adjuvants for **DNA vaccine** delivery
IN Johnson, Mark E.; Mossman, Sally; Cecil, Tricia; Evans, Lawrence
PA Corixa Corporation, USA
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002003961	A1	20020117	WO 2001-US21780	20010709
	W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001071976	A5	20020121	AU 2001-71976	20010709
	US 2002032165	A1	20020314	US 2001-901829	20010709
PRAI	US 2000-216604P	P	20000707		
	WO 2001-US21780	W	20010709		

AB A nucleic acid delivery system that offers, in one system, a combination of high encapsulation efficiency, rapid release kinetics and preservation of DNA in a supercoiled form is provided. The nucleic delivery system comprises nucleic acid mols., such as a DNA, encapsulated in biodegradable microspheres, and is particularly suited for delivery of DNA vaccines. The invention further provides an **adjuvant** for modulating the immunostimulatory efficacy of microspheres encapsulating nucleic acid mols. comprising an aminoalkyl glucosaminide 4-phosphate (AGP). Thus, a quick release, high efficiency, porous, 1-10 .mu.m DNA microsphere formulation was developed by using PLG **copolymer** and tested. Cytotoxic T-lymphocyte (CTL) responses to 2 antigens, Her-2/neu and TbH9, were generated using these DNA microspheres. I.m. and i.p. routes were the best for CTL elicitation. Several AGPs provided substantial CTL **adjuvant** activity to the DNA microspheres. Sodium.

fluoride. (16 ref)

L24 ANSWER 22 OF 42 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1998-07238 BIOTECHDS
TI Production of nucleic acid conjugates;
plasmid DNA and RNA conjugate preparation for use in gene transfer and sense, antisense gene expression control
AU Bayer E; Fritz H; Maier M
PA SKW-Trostberg
LO Trostberg, Germany.
PI DE 19746362 30 Apr 1998
AI DE 1997-1046362 21 Oct 1997
PRAI DE 1997-1046362 21 Oct 1997
DT Patent
LA German
OS WPI: 1998-252414 [23]
AB A new process for the production of conjugates of nucleic acids with polymer nanoparticles involves subjecting sparingly water-soluble vinylic monomers to emulsion polymerization in an aq. medium in the presence of a cationic radical initiator and in the absence of an emulsifier, preferably purifying the suspension by diafiltration or centrifugation, and reacting the resulting polymer suspension with a nucleic acid at 10-30 deg and pH less than 11. The conjugates are useful for gene transfer or for sense or antisense control of gene expression. Conjugates with high nucleic acid loadings and adequate resistance to enzyme degradation can be produced. The monomers preferably have a water solubility below 20 g/l and are selected from styrene, **acrylic** acid derivatives and **methacrylic acid** derivatives.
The polymer suspension has a particle size of 10-1,000 nm. The nucleic acid is optionally chemically modified **DNA** or RNA with a length of 7-40 nucleotides, and is preferably a **plasmid**. (5pp)

L24 ANSWER 11 OF 42 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN 2001213999 EMBASE
TI Copolymers of amine methacrylate with poly(ethylene glycol) as vectors for gene therapy.
AU Rungsardthong U.; Deshpande M.; Bailey L.; Vamvakaki M.; Armes S.P.; Garnett M.C.; Stolnik S.
CS S. Stolnik, School of Pharmaceutical Sciences, University of Nottingham, University Park, Nottingham NG7 2RD, United Kingdom. snjezana.stolnik@nottingham.ac.uk
SO Journal of Controlled Release, (12 Jul 2001) 73/2-3 (359-380).
Refs: 44
ISSN: 0168-3659 CODEN: JCREEC
PUI S 0168-3659(01)00295-4
CY Netherlands
DT Journal; Article
FS 022 Human Genetics
037 Drug Literature Index
LA English
SL English
AB A series of structurally related copolymers of tertiary amine methacrylate with poly(ethylene glycol) (PEG) were investigated for their potential to serve as vectors for gene therapy. The effects of copolymer structure on the complexation and transfection ability were assessed. The ability of the PEG-based copolymers and DMAEMA homopolymer to bind and condense **DNA** was confirmed by gel electrophoresis, ethidium bromide displacement and transmission electron microscopy. The presence of PEG in the copolymers had a beneficial effect on their ability to bind to **DNA**. Colloidally stable complexes were obtained for all the PEG-copolymer systems as shown by uniformly discrete spherical images from transmission electron microscopy and approximate diameters of 80-100 nm by dynamic light scattering studies. DMAEMA homopolymer, however, produced agglomerated particles, confirming the important role played by the PEG chains in producing compact stable **DNA** complexes. Assessment of the effect of ionic strength of the buffer on the complexation and dissociation of the complexes indicated the importance of both electrostatic and non-electrostatic interactions in the polymer-**DNA** complexation. In vitro transfection experiments showed that DMAEMA homopolymer gave the highest level of transfection comparable to a control poly-L-lysine (PLL) system. The PEG-based copolymers gave reduced levels of transfection, most likely due to the steric stabilization effect of a PEG corona. .COPYRGT. 2001 Elsevier Science B.V.